

Protecting Endangered Species Interim Measures for Use of Pesticides in Merced County

The federal Endangered Species Act is intended to protect and promote the recovery of animals and plants that are in danger of becoming extinct due to human activities. Under the Act, the U.S. Environmental Protection Agency (U.S. EPA) must ensure that the use of pesticides it registers will not result in harm to the species listed as endangered or threatened by the U.S. Fish and Wildlife Service, or to habitat critical to those species' survival. This program will protect endangered and threatened species from harm due to pesticide use.

The information provided in this bulletin is similar to what U.S. EPA expects to distribute once the Endangered Species Protection Program is in effect. Individuals who use pesticides during this interim period are not legally required to comply with these suggested measures. At the present time, compliance with the requirements specified on the pesticide product labeling will satisfy all legal requirements regarding pesticides and endangered species protection. While these pesticide use conditions do not yet have the force of law, they are being provided now for your use in voluntarily protecting endangered and threatened species.

Your comments are needed regarding the information presented in this publication. Please contact us to let us know whether the information is clear and correct. Also tell us to what extent following the recommended measures would affect your pesticide use program. This information will be considered by U.S. EPA during the final stages of program development.

Please submit comments to:
DPR Pesticide Registration Branch
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Sacramento, CA 95814
(916) 324-3881
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<http://www.cdpr.ca.gov/docs/es/index.htm>



About This Publication

This publication contains a map of the county including a shaded area where pesticide use should be limited to protect listed species. In the Section List, you will find additional information on the individual species that occur in each section, indexed by county, township, range and section.

The Species Descriptions table lists the taxonomic groups for each species. The Active Ingredients tables list certain pesticides and the activity category (mode of action, etc.) of the pesticide and the taxonomic groups they could adversely affect. The use limitations in this bulletin apply only to listed pesticides where the hazard class of the pesticide matches the hazard class (sensitivity of the taxonomic group) of the species that occur in the section where the pesticide will be used. Within a given section, use limitations only apply to sites that are consistent with habitat as noted in the Species Descriptions table. The Use Limitation Codes table indicates which use limitation codes apply to each species. The Use Limitations table translates limitation codes to use limitations.

Does This Information Apply To You?

To determine whether this information applies to your use of a pesticide, review the questions below. The information applies only if you answer "yes" to all three of these questions:

- Do you intend to use pesticides within the shaded area on the map (p 3) that is further detailed in the Section List (p 40)? If so, note the species from the Section List.
- Are any of the ingredients included in your pesticide product named in the Active Ingredients tables (p 8, 15, 19, 22, 25)?
- If so, does the hazard class(es) of the pesticide you intend to use match one or more of the taxonomic groups of the species as shown in the Species Descriptions table (p 32)?

If you answer "yes" to all three questions, you should follow the instructions on "How to Use This Information" (p 2) to help protect listed species.

If you answer "no" to any of the above questions, this bulletin does not apply to you.

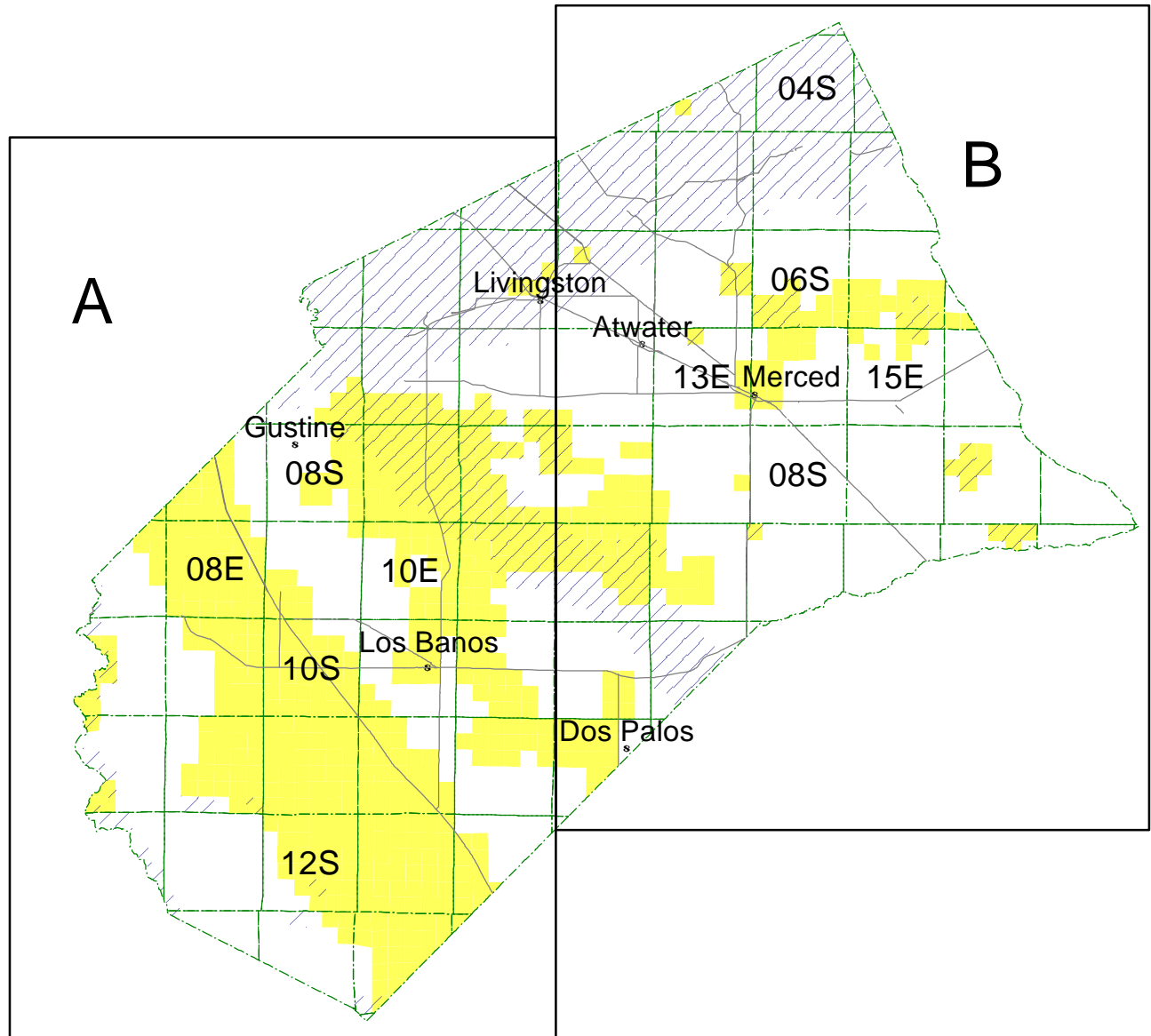


How to Use This Information

See worksheets for each class of pesticide that you intend to use:

<u>Worksheets</u>	<u>Page</u>
Herbicides	6
Insecticides	13
Fungicides	18
Rodenticides - Grain Baits	21
Rodenticides - Fumigants	24

Distribution of Species Addressed in This Bulletin



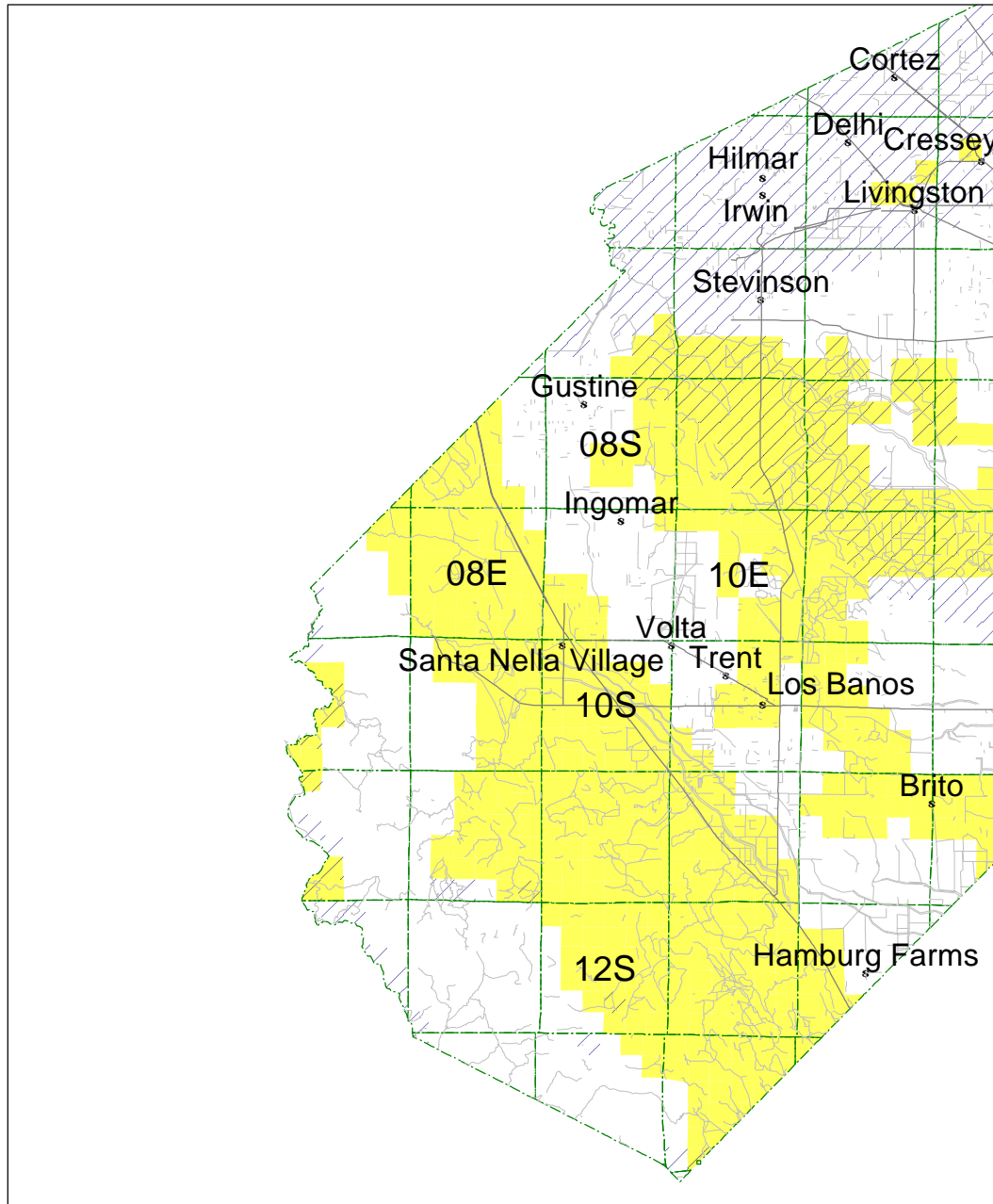
Terrestrial Species



Aquatic Species (restrictions apply only to aquatic habitats and flowing waters within species distribution- refer to the habitat descriptors in the bulletin for further information)

Overview Map

Distribution of Species Addressed in This Bulletin



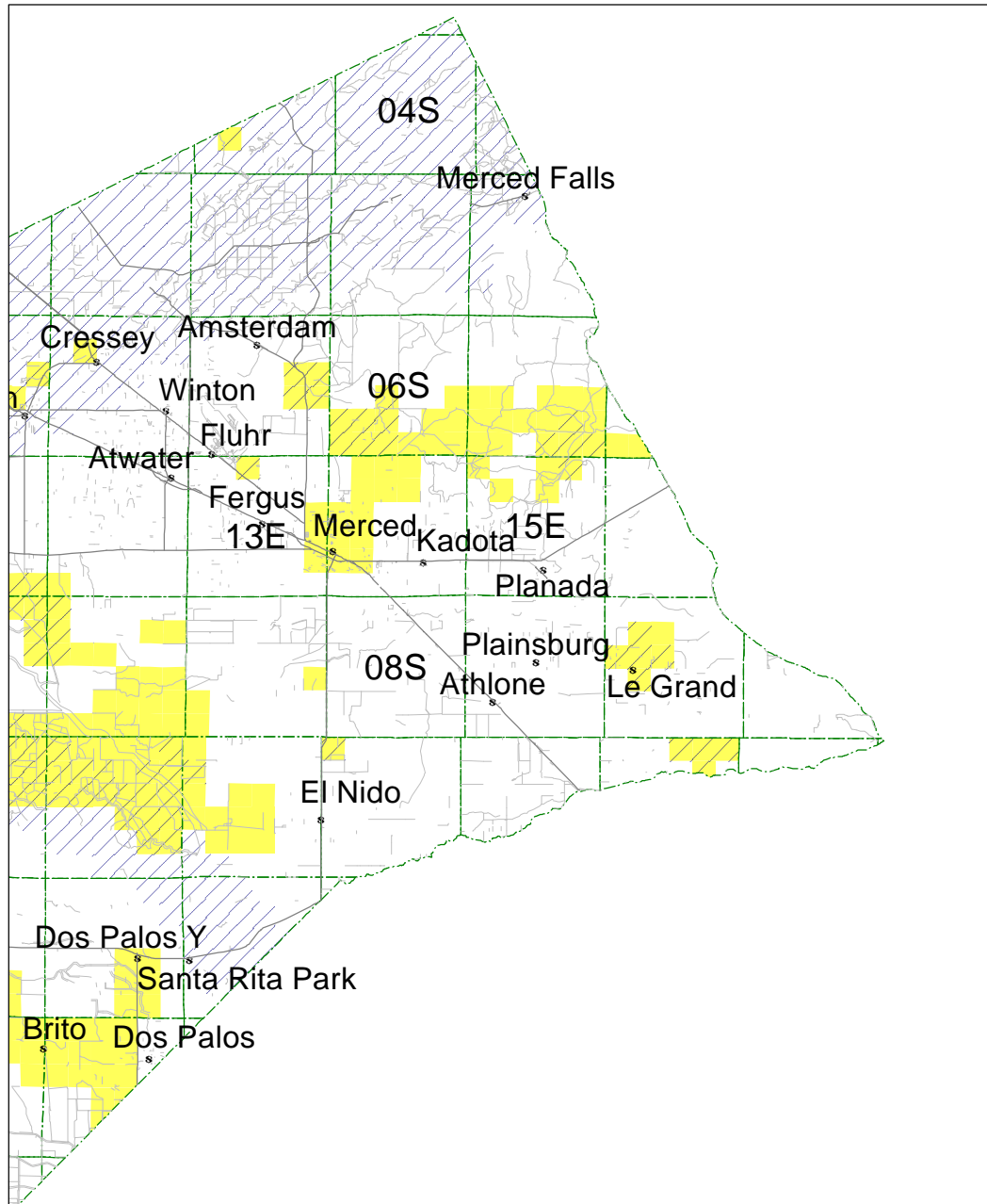
Terrestrial Species



Aquatic Species (restrictions apply only to aquatic habitats and flowing waters within species distribution- refer to the habitat descriptors in the bulletin for further information)

Detail Map A

Distribution of Species Addressed in This Bulletin



Terrestrial Species



Aquatic Species (restrictions apply only to aquatic habitats and flowing waters within species distribution- refer to the habitat descriptors in the bulletin for further information)

Detail Map B

Worksheet for Herbicides

For each section where you will apply herbicides:

1. Is the section inside of the shaded area on the county map (p 3)? Yes () No ()
(if yes, or if you are unsure go on to #2, if no, this bulletin does not apply)
2. Is the section listed in the Section List (p 40)? Yes () No ()
(if yes, go on to #3, if no, this bulletin does not apply)
3. Is the active ingredient of the herbicide(s) you intend to use listed in the Active Ingredients table (p 8-11)?
(if yes, go on to #4, if no, this bulletin does not apply) Yes () No ()
4. For each active ingredient, note the hazard class and activity category (from the Active Ingredients table).

herbicide active ingredient(s) (list each)	Hazard Class (check all that apply)			Activity Category (check one)				
	AQ	PD	PM	a	b	c	d	e
_____	()	()	()	()	()	()	()	()
_____	()	()	()	()	()	()	()	()
_____	()	()	()	()	()	()	()	()
_____	()	()	()	()	()	()	()	()
_____	()	()	()	()	()	()	()	()

5. For each species in the section to be treated, look up the hazard class (taxonomic group) in the Species Descriptions table (p 32) and check all that apply.

AQ	PD	PM
()	()	()

6. Does one or more hazard class(es) of the herbicide(s) from #4 match the hazard class (taxonomic group) for any of the species from #5? (if yes to any, go on to #7, if no, this bulletin does not apply) Yes () No ()
7. Look up the use limitation codes by hazard class and activity category in the Use Limitation Codes table in this section for each pesticide that you intend to use and check all use limitation codes that apply.

Limitation Codes

11 ()	15 ()	16 ()	17 ()	19 ()
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8. Follow the use limitations corresponding to each code as shown in the Use Limitations table (p 27). If more than one code applies and there is a conflict, follow the most restrictive limitation. Note that use limits apply only to sites that match or (where buffer zones apply) are adjacent to sites that match the habitat descriptions in the Species Descriptions table (p 32) for each species.

Active Ingredients Tables

Active ingredients of pesticides covered by this bulletin are listed in separate tables on the following pages by classification as herbicides, insecticides, fungicides or rodenticides. The active ingredients table for each pesticide class specifies the activity category of each active ingredient and one or more hazard classes that are subsequently used to determine appropriate pesticide use limitations.

Herbicide Exposure Categories

Herbicides are grouped by activity categories (a-e) that broadly define mode of action and use patterns that in turn determine potential routes of exposure to listed species. The activity category of an herbicide is the exposure component that is used with the hazard class of the pesticide and the taxonomic group of the species to define which pesticide use limitations (if any) to apply.

Activity Category	Description
a	Broad spectrum foliar active herbicides with systemic or contact activity and without pre-emergent or residual soil activity.
b	Herbicides with foliar activity on broadleaved plants (dicots) only.
c	Herbicides with foliar activity on grasses (monocots) only.
d	Broad spectrum herbicides with residual soil activity.
e	Broad spectrum, seedling stage, pre-emergent herbicides.

Active Ingredients (Herbicides)

Herbicides

Active Ingredients	Activity Category	Hazard Class		
		Aquatic Animals (AQ)	Plants	
			Dicot (PD)	Monocot* (PM)
2,4-D	b		X	
2,4-D, butoxyethanol ester	b	X	X	
2,4-D, dimethylamine salt	b		X	
2-(2,4-DP), dimethylamine salt	b		X	
4(2,4-DB), dimethylamine salt	b		X	
alachlor	d		X	X
atrazine	d		X	X
benefin	e	X	X	X
bensulfuron methyl	d		X	X
bensulide	d		X	X
bentazon, sodium salt	a		X	X
bromacil	d		X	X
bromoxynil	a	X	X	X
butylate	d		X	X
cacodylic acid	a		X	X
carfentrazone-ethyl	a		X	X
chlorsulfuron	d		X	
chlorthal-dimethyl	e		X	X
clethodim	c			X
clopyralid	b		X	
copper	a	X		
copper ethanolamine complex	a	X		

* and gymnosperms

Active Ingredients (Herbicides)

Active Ingredients	Activity Category	Hazard Class		
		Aquatic Animals	Plants	
			Dicot	Monocot*
copper sulfate (basic)	a	X		
copper sulfate pentahydrate	a	X		
cyanazine	d		X	X
cycloate	d		X	X
desmedipham	e		X	X
dicamba, dimethylamine salt	b		X	
dichlobenil	d		X	X
diclofop-methyl	c	X		X
difenzoquat methyl sulfate	a			X
diquat dibromide	a		X	X
dithiopyr	d	X	X	X
diuron	d		X	X
endothall, dipotassium salt	d		X	X
endothall, mono [N,N-dimethyl alkylamine] salt	d		X	X
EPTC	d		X	X
ethafluralin	e	X	X	X
ethofumesate	d		X	X
fenoxaprop	c			X
fluazifop-butyl	c			X
glufosinate	a		X	X
halosulfuron	d		X	X
imazethapyr	d		X	X
isoxaben	d		X	X

* and gymnosperms

Active Ingredients (Herbicides)

Active Ingredients	Activity Category	Hazard Class		
		Aquatic Animals (AQ)	Plants	
			Dicot (PD)	Monocot* (PM)
glyphosate, isopropylamine salt	a		X	X
glyphosate, monoammonium salt	a		X	X
hexazinone	d		X	X
imazapyr	d		X	X
linuron	d		X	X
MCPA, dimethylamine salt	b		X	
MCPP, dimethylamine salt	b		X	
metalochlor	d		X	X
metam-sodium	d	X	X	X
metribuzin	d		X	X
molinate	d		X	X
MSMA	a		X	X
napropamide	d		X	X
nicosulfuron	a		X	X
nonanoic acid	a		X	X
norflurazon	d		X	X
oryzalin	e		X	X
oxadiazon	e	X	X	X
oxyfluorfen	e	X	X	X
paraquat dichloride	a		X	X
pebulate	e		X	X

* and gymnosperms

Active Ingredients (Herbicides)

Herbicides

Active Ingredients	Activity Category	Hazard Class		
		Aquatic Animals (AQ)	Plants	
			Dicot (PD)	Monocot* (PM)
pendimethalin	e	X	X	X
petroleum hydrocarbons	a		X	X
petroleum oil, unclassified	a		X	X
phenmedipham	b		X	
prometon	d		X	X
prometryn	d		X	
pronamide	d		X	X
propanil	a		X	X
pyrazon	d		X	X
pyrithiobac	b		X	
rimsulfuron	d		X	X
sethoxydim	c			X
simazine	d		X	X
sulfometuron, methyl	d		X	X
tebuthiuron	d		X	X
thiazopyr	d		X	X
thiobencarb	a		X	X
triclopyr, butoxyethyl ester	b	X	X	
triclopyr, triethylamine salt	b		X	
trifluralin	e	X	X	X

* and gymnosperms

Use Limitation Codes (Herbicides)

The following table identifies use limitation codes for each combination of hazard class (AQ, PM or PD) and herbicide activity category (a-e). Use the hazard class row(s) that corresponds with both (1) the pesticide (from the Active Ingredients table) and (2) the hazard class (taxonomic group) of the species in the section to be treated (as found in the Species Descriptions table) and the activity category column(s) that corresponds with the herbicide(s) you intend to use. If either (1) the hazard class (taxonomic group) of one or more species does not match at least one of the hazard class(es) of the herbicide you intend to use or (2) if the combination of activity category and hazard class results in a double dash (- -), then no use limitations apply. Note all applicable codes (11-19). These codes are translated in the Use Limitations table (p 27)

Hazard Class	Herbicide Activity Category				
	a	b	c	d	e
AQ	11, 17	11, 17	11, 17	11, 15, 16, 17	11, 17
PM	11, 17	- -	11, 17	11, 16, 17, 19	11
PD	11, 17	11, 17	- -	11, 16, 17, 19	11

Worksheet for Insecticides

For each section where you will apply insecticides:

1. Is the section inside of the shaded area on the county map (p 3)?
(if yes, or if you are unsure go on to #2, if no, this bulletin does not apply)

Yes () No ()
2. Is the section listed in the Section List (p 40)?
(if yes, go on to #3, if no, this bulletin does not apply)

Yes () No ()
3. Is the active ingredient of the insecticide(s) you intend to use listed in the Active Ingredients table (p 15-16)?
(if yes, go on to #4, if no, this bulletin does not apply)

Yes () No ()
4. For each active ingredient, note the hazard class and activity category (from the Active Ingredients table).

insecticide active ingredient(s) (list each)	Hazard Class (check all that apply)				Activity Category
	AQ	AV	IN	PD	
	()	()	()	()	i (x)
	()	()	()	()	(x)
	()	()	()	()	(x)
	()	()	()	()	(x)
	()	()	()	()	(x)

5. For each species in the section to be treated, look up the hazard class (taxonomic group) in the Species Descriptions table (p 32) and check all that apply.

AQ AV IN PD

() () () ()
6. Does one or more toxicity class of the insecticide(s) from #4 match the hazard class (taxonomic group) for any of the species from #5? (if yes to any, go on to #7, if no, this bulletin does not apply)

Yes () No ()
7. Look up the use limitation codes by hazard class and activity category in the Use Limitation Codes table in this section for each insecticide that you intend to use and check all use limitation codes that apply.

Limitation Codes			
10 ()	15 ()	16 ()	17 ()

8. Follow the use limitations corresponding to each code as shown in the Use Limitations table (p 27).
If more than one code applies and there is a conflict, follow the most restrictive limitation. Note that use limits apply only to sites that that match or (where buffer zones apply) are adjacent to sites that match the habitat descriptions in the Species Descriptions table (p 32) for each species.

Activity Categories of Insecticides

There is currently only one activity category for insecticides.

Activity Category	Description
i	Insecticides applied by any method

Active Ingredients (Insecticides)

Active Ingredients	Activity Category	Hazard Class			
		Aquatic (AQ)	Avian (AV)	Insects (IN)	Plants-Dicot* (PD)
acephate	i			X	X
aldicarb	i	X	X		
amitraz	i	X		X	
avermectin	i	X		X	X
azinphos-methyl	i	X	X	X	X
Bacillus thuringiensis	i			X**	
bendiocarb	i	X	X	X	X
bifenthrin	i	X		X	X
buprofezin	i	X		X	X
carbaryl	i	X		X	X***
carbofuran	i	X	X	X	X
carbophenothion	i	X	X	X	X
chlorfenapyr	i	X		X	X
chlorpyrifos	i	X	X	X	X
cyfluthrin	i	X		X	X
cypermethrin	i	X		X	X
cyromazine `	i			X	X
diazinon	i	X	X	X	X
dicofol	i	X	X	X	X
dicrotophos	i	X	X	X	X
diflubenzuron	i	X	X	X	
disulfoton	i	X	X	X	X
endosulfan	i	X	X	X	X
esfenvalerate	i	X		X	X
ethion	i	X		X	
ethoprop	i	X	X	X	X
fenitrothion	i	X	X	X	X

Insecticides

* Non-granular formulations, only when in bloom, to avoid possible adverse impacts on pollination.

** Different strains of Bacillus thuringiensis are selective for different insects. Most strains target

Lepidopterous pests only. See your county agricultural commissioner for details.

*** Except XLR formulation.

Active Ingredients (Insecticides)

Active Ingredients	Activity Category	Hazard Class			
		Aquatic (AQ)	Avian (AV)	Insects (IN)	Plants-Dicot* (PD)
fenpropathrin	i	X		X	X
fenthion (livestock use)	i	X	X		
fenvalerate	i	X		X	X
fluvalinate	i	X		X	X
fonofos	i	X	X	X	X
imidacloprid	i			X	X
malathion	i	X		X	X
methamidophos	i		X	X	X
methidathion	i	X	X	X	X
methiocarb	i		X		X
methomyl	i	X	X	X	X
methyl parathion	i	X	X	X	X
mevinphos	i	X	X		X
naled	i	X		X	X
oxamyl	i	X	X	X	X
oxydemeton-methyl	i	X	X	X	X
parathion	i	X	X	X	X
permethrin	i	X		X	X
phorate	i	X	X	X	X
phosmet	i	X		X	X
profenphos	i	X		X	X
propargite	i	X		X	
pyrethrin	i	X		X	X
pyriproxyfen	i	X		X	
spinosad	i			X	X
tebufenozide	i	X		X	X
temephos	i	X	X	X	X
terbufos	i	X	X	X	X
thiodicarb (1)	i	X		X	X
tralomethrin (1)	i	X		X	X
trichlorfon (2)	i	X		X	

Insecticides

Use Limitation Codes for Insecticides

The following table identifies use limitation codes for each combination of toxicity class (AQ, AV or IN) and activity category (i). Use the hazard class row that corresponds with the taxonomic group(s) of species in the section to be treated. Note all applicable codes (11-17). The double dash (- -) indicates that no use limitations apply. These codes are translated in the Use Limitations table (p 27).

Hazard Class	Insecticide Activity Category
	i
AQ	10, 15, 16, 17
AV	10, 17
IN	10, 17
PD	10

Worksheet for Fungicides

For each section where you will apply fungicides:

- 1. Is the section inside of the shaded area on the county map (p 3)? Yes () No ()
(if yes, or if you are unsure go on to #2, if no, this bulletin does not apply)
- 2. Is the section listed in the Section List (p 40)? Yes () No ()
(if yes, go on to #3, if no, this bulletin does not apply)
- 3. Is the active ingredient of the fungicide(s) you intend to use listed in the Active Ingredients table (p 19)? Yes () No ()
(if yes, go on to #4, if no, this bulletin does not apply)
- 4. For each active ingredient, note the hazard class and activity category (from the Active Ingredients table).

fungicide active ingredient(s) (list each)	Hazard Class	Activity Category
_____	AQ	f
_____	(x)	(x)
_____	(x)	(x)
_____	(x)	(x)
_____	(x)	(x)
_____	(x)	(x)

- 5. For each species in the section to be treated, look up the hazard class (taxonomic group) in the Species Descriptions table (p 32) and check all that apply.

AQ
(x)

- 6. Does one or more hazard class of the fungicide(s) from #4 match the hazard class (taxonomic group) for any of the species from #5? (if yes to any, go on to #7, if no, this bulletin does not apply) Yes () No ()
- 7. Look up the use limitation codes by hazard class and activity category in the Use Limitation Codes table in this section for each fungicide that you intend to use and check all use limitation codes that apply.

Limitation Codes

10 (x) 15 (x) 16 (x) 17 (x)

- 8. Follow the use limitations corresponding to each code as shown in the Use Limitations table (p 27). If more than one code applies and there is a conflict, follow the most restrictive limitation. Note that use limits apply only to sites that that match or (where buffer zones apply) are adjacent to sites that match the habitat descriptions in the Species Descriptions (p 32) table for each species.

Active Ingredients (Fungicides)

Active Ingredients	Activity Category	Hazard Class
		Aquatic (AQ)
Azoxystrobin	f	X
Benomyl	f	X
Captan	f	X
Carboxin	f	X
Chlorothalonil	f	X
Copper	f	X
Copper Ammonium Carbonate	f	X
Copper Ammonium Complex	f	X
Copper Hydroxide	f	X
Copper Octanoate	f	X
Copper Oxychloride	f	X
Copper Oxychloride Sulfate	f	X
Copper Salts of Fatty and Rosin Acids	f	X
Copper Sulfate (Basic)	f	X
Copper Sulfate (Pentahydrate)	f	X
Dazomet	f	X
Difenoconazole	f	X
Dimethomorph	f	X
Fenbuconazole	f	X
Fludioxonil	f	X
Mancozeb	f	X
Maneb	f	X
Manganese Sulfate	f	X
Oxythioquinox	f	X
PCNB	f	X
Piperalin	f	X
Propiconazole	f	X
Tebuconazole	f	X
Thiabendazole	f	X
Thiram	f	X
Triflumizole	f	X
Ziram	f	X
Zineb	f	X

Use Limitation Codes for Fungicides

The following table identifies use limitation codes for the hazard class (AQ) and fungicide activity category (f). Note all applicable codes (10-17). These codes are translated on page 27.

Hazard Class	Fungicide Activity Category
	f
AQ	10, 15, 16, 17

Worksheet for Grain Bait Rodenticides

For each section where you will apply grain bait rodenticides:

1. Is the section inside of the shaded area on the county map (p 3)? Yes () No ()
(if yes, or if you are unsure go on to #2, if no, this bulletin does not apply)
2. Is the section listed in the Section List (p 40)? Yes () No ()
(if yes, go on to #3, if no, this bulletin does not apply)
3. Is the active ingredient of the pesticide(s) you intend to use listed in the Active Ingredients table (p 22)? Yes () No ()
(if yes, go on to #4, if no, this bulletin does not apply)
4. For each active ingredient, note the hazard class and activity category (from the Active Ingredients table).

Rodenticide active ingredient(s) (list each)	Hazard Class							Activity Category		
	BB	CB	GB	HM	KF	KR	LH	g	h	k
_____	()	()	()	()	()	()	()	()	()	()
_____	()	()	()	()	()	()	()	()	()	()
_____	()	()	()	()	()	()	()	()	()	()
_____	()	()	()	()	()	()	()	()	()	()
_____	()	()	()	()	()	()	()	()	()	()

5. For each species in the section to be treated, look up the hazard class (taxonomic group) in the Species Descriptions table (p 32) and check all that apply.

BB	CB	GB	HM	KF	KR	LH
()	()	()	()	()	()	()

6. Does one or more hazard class of the pesticide(s) from #4 match the hazard class (taxonomic group) for any of the species from #5? (if yes to any, go on to #7, if no, this bulletin does not apply) Yes () No ()
7. Look up the use limitation codes by hazard class and activity category in the Use Limitation Codes table in this section for each pesticide that you intend to use and check all use limitation codes that apply.

Limitation Codes					
1A ()	1B ()	1C ()	1D ()	2 ()	3 ()
4 ()	7 ()	8 ()	33 ()	34 ()	

8. Follow the use limitations corresponding to each code as shown in the Use Limitations table (p 27). If more than one code applies and there is a conflict, follow the most restrictive limitation. Note that use limits apply only to sites that match or (where buffer zones apply) are adjacent to sites that match the habitat descriptions in the Species Descriptions table (page 32) for each species.

Active Ingredients (Rodenticides)

Active Ingredients	Activity Category	Hazard Class						
		Bait Box (BB)	Carni-vorous Birds (CB)	Grani-vorous Birds (GB)	Salt Marsh Harvest Mouse (HM)	Kit Fox (KF)	Kangaroo Rats (KR)	Very Limited Habitat (LH)
Brodifacoum	k	X	X	X	X	X	X	X
Bromadiolone	k	X	X	X	X	X	X	X
Bromethalin	k	X	X	X	X	X	X	X
Chlorophacinone	g	X	X	X	X	X	X	X
Difenacoum	k	X	X	X	X	X	X	X
Difethialone	k	X	X	X	X	X	X	X
Diphacinone	g	X	X	X	X	X	X	X
Pival	k	X	X	X	X	X	X	X
Vitamin D3	k	X	X	X	X	X	X	X
Warfarin	k	X	X	X	X	X	X	X
Zinc Phosphide	h	X	X	X	X	X	X	X

Activity Categories of Grain Bait Rodenticides

Activity Category	Description
g	Field use chronic toxicant grain bait
h	Field use acute toxicant grain bait
k	Structural use rodenticide

Use Limitation Codes for Rodenticide Grain Baits

The following table identifies use limitation codes for each combination of hazard class (BB, CB, etc.) and rodenticide activity category (g-k). Use the row(s) that corresponds with the hazard class (taxonomic group) of the species in the section to be treated and the rodenticide activity column(s) that corresponds with the rodenticide(s) you intend to use. Note all applicable codes (1-34). The double dash (- -) indicates that no use limitations apply. These codes are translated in the Use Limitations table (p 27)

Hazard Class	Rodenticide Grain Bait Activity Category		
	g	h	k
BB	7	7	7
CB	1D	- -	7
GB	1B, 1C	1B, 1C	7
HM	7 or 34	7 or 34	7
KF	1, 2, 3, 4	3	7
KR	8	8	7
LH	33	33	33

Worksheet for Fumigant Rodenticides

For each section where you will apply fumigant rodenticides:

1. Is the section inside of the shaded area on the county map (p 3)? Yes () No ()
(if yes, or if you are unsure go on to #2, if no, this bulletin does not apply)
2. Is the section listed in the Section List (p 40)? Yes () No ()
(if yes, go on to #3, if no, this bulletin does not apply)
3. Is the active ingredient of the pesticide(s) you intend to use listed in the Active Ingredients table (p 25)? Yes () No ()
(if yes, go on to #4, if no, this bulletin does not apply)
4. For each active ingredient, note the hazard class and activity category (from the Active Ingredients table).

Rodenticide active ingredient(s) (list each)	Hazard Class					Activity Category
	S1	S2	LH	WW	FS	j
_____	(x)	(x)	(x)	(x)	(x)	(x)
_____	(x)	(x)	(x)	(x)	(x)	(x)
_____	(x)	(x)	(x)	(x)	(x)	(x)
_____	(x)	(x)	(x)	(x)	(x)	(x)
_____	(x)	(x)	(x)	(x)	(x)	(x)

5. For each species in the section to be treated, look up the hazard class (taxonomic group) in the Species Descriptions table (p 32) and check all that apply.

S1	S2	LH	WW	FS
()	()	()	()	()

6. Does one or more hazard class of the pesticide(s) from #4 match the hazard class (taxonomic group) for any of the species from #5? (if yes to any, go on to #7, if no, this bulletin does not apply) Yes () No ()
7. Look up the use limitation codes by hazard class and activity category in the Use Limitation Codes table in this section for each pesticide that you intend to use and check all use limitation codes that apply.

Limitation Codes

5 ()	30 ()	31 ()	32 ()	33 ()
-------	--------	--------	--------	--------

8. Follow the use limitations corresponding to each code as shown in the Use Limitations table (p 27). If more than one code applies and there is a conflict, follow the most restrictive limitation. Note that use limits apply only to sites that match or (where buffer zones apply) are adjacent to sites that match the habitat descriptions in the Species Descriptions table (p 32) for each species.

Active Ingredients (Rodenticides - Burrow Fumigants)

Active Ingredients	Activity Category	Hazard Class				
		Seasonal Limitation 1 (S1)	Seasonal Limitation 2 (S2)	Limited Habitat (LH)	Waterways (WW)	Fossorial (Burrowing) Species (FS)
Acrolein	j	X	X	X	X	X
Aluminum phosphide	j	X	X	X	X	X
Magnesium phosphide	j	X	X	X	X	X
Sodium Nitrate	j	X	X	X	X	X
Potassium Nitrate	j	X	X	X	X	X

Activity Categories of Burrow Fumigant Rodenticides

Activity Category	Description
j	Burrow Fumigants

Use Limitation Codes for Fumigant Rodenticides

The following table identifies use limitation codes for each combination of hazard class (S1, S2, etc.) and fumigant rodenticide activity category (j). Use the hazard class row(s) that corresponds with the hazard class of the species (taxonomic group) in the section to be treated and the herbicide activity column(s) that corresponds with the fumigant(s) you intend to use. Note all applicable codes (5-32). These codes are translated in the Use Limitations table (p 27).

Hazard Class	Fumigant Rodenticide Activity Category
	j
S1	31, 5
S2	32, 5
LH	33
WW	30
FS	5

Use Limitations

1A	<p>Bait station applications:</p> <p><i>Formulation:</i> The active ingredient shall not exceed 0.005% in the formulated bait.</p>
1B	<p>Bait Station Design and Use: Bait stations shall be designed with an opening that prevents access to non-target species (not to exceed 3") and controls bait spillage by feeding rodents. See your county agricultural commissioner for recommended designs and suggestions to retrofit existing stations. Bait stations shall be secured (e.g. staked) upright to prevent tipping and access by non-target animals. Bait stations shall not be filled beyond design capacity and in no case shall bait stations be filled with more than 10 lbs of bait.</p>
1C	<p>Station Monitoring: While treated baits are in use, bait stations shall be inspected for spillage, evidence of disturbance by non-target animals, excess moisture from irrigation systems, etc. Problems shall be corrected before baiting is resumed. Any spilled baits shall be promptly cleaned up (scattering limited quantities of spilled bait in non-crop areas is acceptable if allowed by labeling). Bait stations shall be replenished with treated baits as needed to provide continuous exposure. After treated baits are accepted, as evidenced by consumption of baits, depletion of bait in the bait station shall be inspected at least weekly for depletion of bait and refilled until feeding ceases. Treated baits shall be promptly removed (or bait stations shall be sealed) from all stations after feeding has ceased. If subsequent baiting is needed, a two week period without use of treated baits shall be observed before baiting is resumed. This is to keep the period when treated bait is exposed to a minimum without jeopardizing good pest control.</p>
1D	<p>Carcass Survey and Disposal: Carcass survey and disposal shall be performed in the treated area beginning on the third day following the initial exposure of toxic baits. Any exposed carcasses shall be disposed of (e.g., completely buried) in a manner inaccessible to wildlife. Carcass surveys shall continue for at least 5 days after toxic baiting has ceased and thereafter until no more carcasses are found. Carcasses should be handled with care to avoid contact with parasites such as fleas.</p>
1E	<p>Pre-baiting (optional): Pre-baiting of bait stations with non-toxic (untreated) grains such as oats, oat groats or barley is optional, but may reduce the time period for carcass surveys. Pre-baiting will acclimate the pest species to feed in bait stations and should be continued until most of the target population is feeding from the stations. The period of toxic bait exposure may be shortened as will the period when pest carcasses may be exposed. The untreated grain need not be the same as the treated grain, but milo or cracked corn should be strictly avoided due to their attractiveness to birds.</p>

Use Limitations

2A	<p>Broadcast (mechanical) and spot (hand) applications</p> <p><i>Formulation:</i> The active ingredient shall not exceed 0.01% in the formulated bait.</p>
2B	<p><i>Test Baiting/Bait Acceptance:</i> Prior to the main application of toxic baits by spot or broadcast method, a small amount of the bait shall be applied to determine bait acceptance. Test baits shall be broadcast by the same method that will be used for control baiting.</p>
2C	<p><i>Use of Treated Baits:</i> Use of treated baits shall begin only when bait acceptance is confirmed by consumption of test baits. Piling of baits shall be avoided. No additional applications shall be made whenever significant quantities of previously applied bait remain. Do not place baits directly into burrows. Do not exceed label application rates.</p> <p>Spot Baiting - Scatter a handful of bait (about 10 handfulls per pound) evenly over 40 to 50 square feet near active burrows or runways. Repeat every other day until feeding ceases.</p> <p>Mechanical Spreader - Apply at the rate of 10 pounds per swath acre through infested area. Follow with a second application in 2 to 3 days.</p>
2D	<p><i>Carcass Survey and Disposal:</i> See Limitation Code 1D.</p>
3	<p>Use of pelletized formulations for control of ground squirrels is prohibited, except in bait stations as described in Limitation Code 1 (A, B, C, E).</p>
4	<p>Jackrabbits may be controlled by using self-dispensing bait stations provided that:</p> <ul style="list-style-type: none"> Bait acceptance is first determined. Carcasses are removed and stations are monitored as described in Limitation Codes 1C and 1D respectively. Baiting ceases when feeding stops. Baits are placed only where jackrabbits are active. Use of pelletized baits is prohibited.

Use Limitations

<p>5</p>	<p>Use shall be supervised by a person (wildlife biologist, county agricultural commissioner, university extension advisor, state or federal official or others) who is trained to distinguish dens and burrows of target species from those of non-target species. Use shall occur only in the active burrows of target species. The person responsible for supervision shall be aware of the conditions at the site of application and be available to direct and control the manner in which applications are made (per Section 6406 of Title 3, California Code of Regulations). Contact your county agricultural commissioner for information on training.</p>
<p>7</p>	<p>For commensal rodent control, outdoor use must be in tamper resistant bait boxes placed in areas inaccessible to wildlife.</p>
<p>8</p>	<p>Use is prohibited EXCEPT under any ONE of the following conditions (in all cases where toxic baits are applied, any spilled baits shall be immediately removed or buried to prevent exposure to non-target species):</p> <p>For commensal rodent control, outdoor use must be in tamper resistant bait boxes placed in areas inaccessible to wildlife.</p> <p>An approved bait station (see your county agricultural commissioner for approved designs) is used that is fitted with an entrance that provides selective access to pest species but does not allow access to kangaroo rats, OR</p> <p>Bait is placed only in bait stations that are elevated to preclude exposure to kangaroo rats, and designed to prevent spillage by rodents feeding (see your county agricultural commissioner for specifications), OR</p> <p>Baits are placed in bait stations during daylight hours only and are removed (or entrances are closed) by dusk each day, OR</p> <p>Broadcast application of baits is allowed in fields under active cultivation with the maintenance of a 10 yard wide border of untreated crops where fields are adjacent to areas of natural vegetation. For purposes of this provision, fields under active cultivation means fields that have been tilled within the last one year or that such fields are irrigated by furrow, flood or overlapping sprinkler method.</p>
<p>10</p>	<p>Do not use in currently occupied habitat (see Species Descriptions table for possible exceptions).</p>

Use Limitations

Code	Limitation
11	Do not use in currently occupied habitat except: (1) as specified in Habitat Descriptors, (2) in organized habitat recovery programs, or (3) for selective control of invasive exotic plants.
15	Provide a 20 foot minimum strip of vegetation (on which pesticides should not be applied) along rivers, creeks, streams, wetlands, vernal pools and stock ponds or on the downhill side of fields where run-off could occur. Prepare land around fields to contain run-off by proper leveling, etc. Contain as much water "on-site" as possible. The planting of legumes, or other cover crops for several rows adjacent to off-target water sites is recommended. Mix pesticides in areas not prone to run-off such as concrete mixing/loading pads, disked soil in flat terrain or graveled mix pads, or use a suitable method to contain spills and/or rinsate. Properly empty and triple-rinse pesticide containers at time of use.
16	Conduct irrigations efficiently to prevent excessive loss of irrigation waters through run-off. Schedule irrigations and pesticide applications to maximize the interval of time between the pesticide application and the first subsequent irrigation. Allow at least 24 hours between application of pesticides listed in this bulletin and any irrigation that results in surface run-off into natural waters. Time applications to allow sprays to dry prior to rain or sprinkler irrigations. Do not make aerial applications while irrigation water is on the field unless surface run-off is contained for 72 hours following the application.
17	For sprayable or dust formulations: when the air is calm or moving away from habitat, commence applications on the side nearest the habitat and proceed away from the habitat. When air currents are moving toward habitat, do not make applications within 200 yards by air or 40 yards by ground upwind from occupied habitat. The county agricultural commissioner may reduce or waive buffer zones following a site inspection, if there is an adequate hedgerow, windbreak, riparian corridor or other physical barrier that substantially reduces the probability of drift.
19	Do not apply within 30 yards upslope of habitat unless a suitable method is used to contain or divert runoff waters.

Use Limitations

30	Use is prohibited within 500 feet of water courses at any time, EXCEPT a) in cultivated areas
31	Use is prohibited from October 1 through April 30, EXCEPT: a) in cultivated areas, or b) on the water side of water supply channels
32	Use is prohibited from July 1 through February 28, EXCEPT: a) in cultivated areas, or b) on the water side of water supply channels.
33	Use is prohibited EXCEPT with a prior site evaluation by the county agricultural commissioner in cooperation with the California Department of Fish and Game and the U.S. Fish and Wildlife Service.
34	For commensal rodent control, outdoor use near salt marshes is limited to sites that are separated by at least 10 yards of barren (or clean cultivated) ground from pickleweed habitat or from the inland side of the levee. This buffer strip should be above the high tide line.

Species Descriptions

ALEUTIAN CANADA GOOSE



Photo: Roy Lowe

Scientific Name: *BRANTA CANADENSIS LEUCOPAREIA*

Federal Status: Threatened

Species Description:

The Aleutian Canada goose is one of eleven subspecies of the familiar white-cheeked Canada geese. It is distinguished by its smaller size, abrupt forehead with short bill, and usually by a pronounced ring of white feathers around the base of the neck

Habitat Description:

FORAGES ON NATURAL PASTURE OR THAT CULTIVATED TO GRAIN; LOAFES ON LAKES, RESERVOIRS, PONDS. WINTERS ON LAKES AND INLAND PRAIRIES.

Hazard Class:

AV

BLUNT-NOSED LEOPARD LIZARD



Photo: B. "Moose" Peterson/WRP

Scientific Name: *GAMBELIA SILA*

Federal Status: Endangered

Species Description:

A relatively large lizard (to 4.5 inches from snout to vent) with a long, regenerative tail. It is multicolored with a striping pattern on its back, which breaks into spots as the lizard grows.

Habitat Description:

SEEKSCOVER IN MAMMAL BURROWS, UNDER SHRUBS OR STRUCTURES SUCH AS FENCE POSTS; THEY DO NOT EXCAVATE THEIR OWN BURROWS. RESIDENT OF SPARSELY VEGETATED ALKALI AND DESERT SCRUB HABITATS, IN AREAS OF LOW TOPOGRAPHIC RELIEF.

Hazard Class:

FS

Species Descriptions

CALIFORNIA RED-LEGGED FROG



Photo: John Brode, CDFG

Scientific Name: *RANA AURORA DRAYTONII*

Federal Status: Threatened

Species Description:

Up to 5 in. long, undersides of adults largely red; backs have black flecks and blotches, on a brown, gray, olive, or reddish background color; tadpoles range from 0.6 to 3.1 long, are dark brown and yellow with darker spots.

Habitat Description:

REQUIRES 11-20 WEEKS OF PERMANENT WATER FOR LARVAL DEVELOPMENT. MUST HAVE ACCESS TO ESTIVATION HABITAT. LOWLANDS & FOOTHILLS IN OR NEAR PERMANENT SOURCES OF DEEP WATER WITH DENSE, SHRUBBY OR EMERGENT RIPARIAN VEGETATION.

Hazard Class:

AQ, FS

CHINOOK SALMON (SRWR-ESU)



Photo: NMFS

Scientific Name: *ONCORHYNCHUS TSHAWYTSCHA*

Federal Status: Threatened

Species Description:

Chinook are largest of the salmon, adults often exceed 40 pounds. They use a variety of freshwater habitats, but it is more common to see them spawn in larger mainstem rivers than other salmon species.

Habitat Description:

OCCURS IN THE SACRAMENTO RIVER BELOW IMPASSABLE BARRIERS, ENTERS THE RIVER NOVEMBER TO JUNE AND SPAWNS FROM LATE APRIL TO MID-AUGUST.

Hazard Class:

AQ

Species Descriptions

COLUSA GRASS



Photo: Susan Cochrane

Scientific Name: *NEOSTAPFIA COLUSANA*

Federal Status: Threatened

Species Description:

A robust, tufted annual 3 to 12 in height; stems are decumbent (lying close to the ground) toward the base with the upper portion erect and terminating in distinctive, spike-like flowers resembling small ears of corn.

Habitat Description:

USUALLY IN LARGE, OR DEEP VERNAL POOL BOTTOMS; ADOBE SOILS. 5-110M. VERNAL POOLS.

Hazard Class:

PM

CONSERVANCY FAIRY SHRIMP



Photo: Brent Helm, Jones & Stokes

Branchinecta sp.

Scientific Name: *BRANCHINECTA CONSERVATIO*

Federal Status: Endangered

Species Description:

To 1.1 in. long, with compound eyes on stalks, 11 pairs of swimming legs, elongate, segmented bodies lacking a hard protective cover. Eggs survive drought as cysts, hatch with first rains, develop rapidly, reproduce and often die long before pools dry up.

Habitat Description:

INHABIT ASTATIC POOLS LOCATED IN SWALES FORMED BY OLD, BRAIDED ALLUVIUM; FILLED BY WINTER/SPRING RAINS, LAST UNTIL JUNE. ENDEMIC TO THE GRASSLANDS OF THE NORTHERN TWO-THIRDS OF THE CENTRAL VALLEY; FOUND IN LARGE, TURBID POOLS.

Hazard Class:

AQ

Species Descriptions

GIANT GARTER SNAKE



Photo: John Brode, CDFG

Scientific Name: *THAMNOPHIS GIGAS*

Federal Status: Threatened

Species Description:

A dull brown snake with a pale dorsal stripe and black markings, attaining lengths up to 4 feet, heavy bodied with a large head, feeds in aquatic sites, often found in irrigation ditches.

Habitat Description:

THIS IS THE MOST AQUATIC OF THE GARTER SNAKES IN CALIFORNIA. PREFERS FRESHWATER MARSH AND LOW GRADIENT STREAMS. HAS ADAPTED TO DRAINAGE CANALS & IRRIGATION DITCHES.

Hazard Class:

FS, S1

GIANT KANGAROO RAT



Photo: B. "Moose" Peterson/WRP

Scientific Name: *DIPODOMYS INGENS*

Federal Status: Endangered

Species Description:

A nocturnal rodent, largest of the genus, measuring up to 13 inches from nose to end of tail.

Habitat Description:

NEED LEVEL TERRAIN & SANDY LOAM SOILS FOR BURROWING. ANNUAL GRASSLANDS ON THE WESTERN SIDE OF THE SAN JOAQUIN VALLEY, MARGINAL HABITAT IN ALKALI SCRUB.

Hazard Class:

FS, KR

Species Descriptions

LONGHORN FAIRY SHRIMP



Photo: Brent Helm, Jones & Stokes

Branchinecta sp.

Scientific Name: *BRANCHINECTA LONGIANTENNA*

Federal Status: Endangered

Species Description:

Ranges in size from 0.5 to 0.8 inches, differs from other branchinectids in that a portion of the distal segment of its antennae is flattened in the antero-posterior plane rather than the latero-medial plane.

Habitat Description:

INHABIT SMALL, CLEAR-WATER DEPRESSIONS IN SANDSTONE AND CLEAR-TO-TURBID CLAY/GRASS-BOTTOMED POOLS IN SHALLOW SWALES. ENDEMIC TO THE EASTERN MARGIN OF THE CENTRAL COAST MTNS IN SEASONALLY ASTATIC GRASSLAND VERNAL POOLS.

Hazard Class:

AQ

SAN JOAQUIN KIT FOX

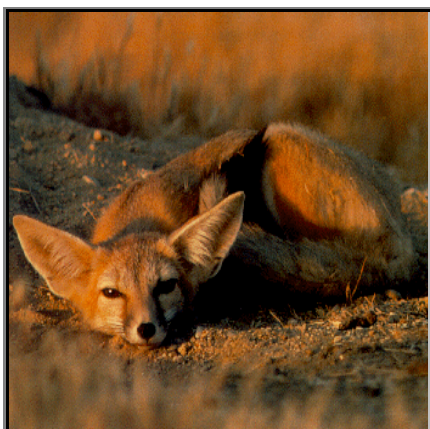


Photo: Bernard Peyton

Scientific Name: *VULPES MACROTIS MUTICA*

Federal Status: Endangered

Species Description:

Large ears, slender body to 20 in. long and 12 in. shoulder height, 12" bushy cylindrical tail tapering toward the tip, average weight 4.6 to 5.0 pounds, light buff gray pelage on back, white underneath, black tipped tail.

Habitat Description:

NEED LOOSE-TEXTURED SANDY SOILS FOR BURROWING, AND SUITABLE PREY BASE. ANNUAL GRASSLANDS OR GRASSY OPEN STAGES WITH SCATTERED SHRUBBY VEGETATION.

Hazard Class:

FS, KF

Species Descriptions

SAN JOAQUIN VALLEY ORCUTT GRASS



Photo: Craig Martz

Scientific Name: *ORCUTTIA INAEQUALIS*

Federal Status: Threatened

Species Description:

A densely tufted, downy annual reaching 2 to 8 in height with stems erect or decumbent, spike-like flower stalks.

Habitat Description:

30-755M. VERNAL POOLS. ENDEMIC TO THE SAN JOAQUIN VALLEY.

Hazard Class:

PM

STEELHEAD TROUT (CCV-ESU)



Photo: NMFS

Scientific Name: *ONCHORYNCHUS MYKISS*

Federal Status: Threatened

Species Description:

A genetically distinct and evolutionarily significant anadromous or freshwater fish related to rainbow and cutthroat trout.

Habitat Description:

COASTAL STREAMS

Hazard Class:

AQ

Species Descriptions

VALLEY ELDERBERRY LONGHORN BEETLE



Photo: Richard A. Arnold

Scientific Name: *DESMOCERUS CALIFORNICUS DIMORPHUS*

Federal Status: Threatened

Species Description:

Adults to 3/4-inch long, forewings on females dark metallic green with flame trimmings, males similar or red-black with dark green spots and prominent segmented antennae, appearing from elderberry bloom until June.

Habitat Description:

PREFERS TO LAY EGGS IN ELDERBERRIES 2-8 INCHES IN DIAMETER; SOME PREFERENCE SHOWN FOR "STRESSED" ELDERBERRIES. OCCURS ONLY IN THE CENTRAL VALLEY OF CALIFORNIA, IN ASSOCIATION WITH BLUE ELDERBERRY (*SAMBUCUS MEXICANA*).

Hazard Class:

IN

VERNAL POOL FAIRY SHRIMP



Photo: Brent Helm, Jones & Stokes

Scientific Name: *BRANCHINECTA LYNCHI*

Federal Status: Threatened

Species Description:

1/2 to 1-1/2 inch crustaceans swimming upside down (ventral side up), adults have stalked compound eyes, two sets of antennae, and 11 pairs of leaf-like swimming legs. Coloration varies widely from orange to red, blue, gray or green due to food source.

Habitat Description:

INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS. ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.

Hazard Class:

AQ

Species Descriptions

VERNAL POOL TADPOLE SHRIMP



Photo: Brent Helm, Jones & Stokes

Scientific Name: *LEPIDURUS PACKARDI*

Federal Status: Endangered

Species Description:

A crustacean to 2 inches in length, having 35 pairs of legs and distinguished from the superficially similar ricefield tadpole shrimp in possessing a flat paddle-shaped supra-anal plate.

Habitat Description:

POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID. INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

Hazard Class:

AQ

Section List - Merced County

Sections	Species
03S14E: S34-36	Steelhead Trout (CCV-ESU)
04S12E: S25,34-36	Steelhead Trout (CCV-ESU)
04S13E: S13-15,20-28	Steelhead Trout (CCV-ESU)
04S13E: S29	Colusa Grass, Steelhead Trout (CCV-ESU)
04S13E: S30-35	Steelhead Trout (CCV-ESU)
04S13E: S36	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
04S14E: S1-5,7-30	Steelhead Trout (CCV-ESU)
04S14E: S31-36	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
04S15E: S31	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
04S15E: S32-33	Steelhead Trout (CCV-ESU)
04S15E: S7,18-20,29-30	Steelhead Trout (CCV-ESU)
05S10E: S25,34-36	Steelhead Trout (CCV-ESU)
05S11E: S12-15,20-36	Steelhead Trout (CCV-ESU)
05S12E: S1-5,7-22	Steelhead Trout (CCV-ESU)
05S12E: S23-27	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
05S12E: S28-31	Steelhead Trout (CCV-ESU)
05S12E: S32-36	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
05S13E: S1-3	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
05S13E: S24-26	Steelhead Trout (CCV-ESU)
05S13E: S27-32	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
05S13E: S33-34	Steelhead Trout (CCV-ESU)
05S13E: S4-7	Steelhead Trout (CCV-ESU)
05S13E: S8-23	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
05S14E: S1-12	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
05S14E: S13-25,30	Steelhead Trout (CCV-ESU)
05S15E: S18-19,30	Steelhead Trout (CCV-ESU)
05S15E: S3	Chinook Salmon (SRWR-ESU)
05S15E: S4-7	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
05S15E: S8-10	Chinook Salmon (SRWR-ESU)
06S09E: S12-14	Steelhead Trout (CCV-ESU)
06S09E: S15,21-23	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
06S09E: S24	Steelhead Trout (CCV-ESU)
06S09E: S25-28,33-36	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
06S10E: S1-5,7-12	Steelhead Trout (CCV-ESU)
06S10E: S13	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
06S10E: S14-20	Steelhead Trout (CCV-ESU)
06S10E: S21-36	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
06S11E: S1	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)

Section List - Merced County

Sections	Species
06S11E: S13	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU), Valley Elderberry Longhorn Beetle
06S11E: S14-21	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
06S11E: S2-8	Steelhead Trout (CCV-ESU)
06S11E: S22-23	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU), Valley Elderberry Longhorn Beetle
06S11E: S24-26	Chinook Salmon (SRWR-ESU)
06S11E: S27-30	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
06S11E: S31-35	Chinook Salmon (SRWR-ESU)
06S11E: S9-12	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
06S12E: S1-7	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
06S12E: S11-12,15-16	Chinook Salmon (SRWR-ESU)
06S12E: S17-18	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
06S12E: S19-21,30	Chinook Salmon (SRWR-ESU)
06S12E: S8	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU), Valley Elderberry Longhorn Beetle
06S12E: S9-10	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
06S13E: S13-14,23-24	Vernal Pool Fairy Shrimp
06S13E: S6	Chinook Salmon (SRWR-ESU)
06S14E: S21	Vernal Pool Fairy Shrimp
06S14E: S24-26	Colusa Grass
06S14E: S28-31	Vernal Pool Fairy Shrimp
06S14E: S32-33	Colusa Grass, Vernal Pool Fairy Shrimp
06S14E: S34-35	Colusa Grass
06S14E: S36	Colusa Grass, San Joaquin Valley Orcutt Grass
06S15E: S19-20,22	Colusa Grass, San Joaquin Valley Orcutt Grass
06S15E: S23	Colusa Grass
06S15E: S24-25	San Joaquin Valley Orcutt Grass
06S15E: S26	Colusa Grass, San Joaquin Valley Orcutt Grass, Vernal Pool Fairy Shrimp
06S15E: S27	Colusa Grass, San Joaquin Valley Orcutt Grass
06S15E: S28	Colusa Grass
06S15E: S29-30	Colusa Grass, San Joaquin Valley Orcutt Grass
06S15E: S31-32	Colusa Grass
06S15E: S34-35	Colusa Grass, San Joaquin Valley Orcutt Grass, Vernal Pool Fairy Shrimp
06S15E: S36	Vernal Pool Fairy Shrimp
06S16E: S31-32	Colusa Grass, San Joaquin Valley Orcutt Grass
07S08E: S25,36	Steelhead Trout (CCV-ESU)
07S09E: S1-4,9-11	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
07S09E: S12-15	Chinook Salmon (SRWR-ESU)

Section List - Merced County

Sections	Species
07S09E: S16	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
07S09E: S17,19-20	Steelhead Trout (CCV-ESU)
07S09E: S22-23	Chinook Salmon (SRWR-ESU)
07S09E: S24	Chinook Salmon (SRWR-ESU), Longhorn Fairy Shrimp, Vernal Pool Tadpole Shrimp
07S09E: S25	Chinook Salmon (SRWR-ESU), Longhorn Fairy Shrimp, San Joaquin Kit Fox, Vernal Pool Tadpole Shrimp
07S09E: S26	Longhorn Fairy Shrimp, Vernal Pool Tadpole Shrimp
07S09E: S29-30	Steelhead Trout (CCV-ESU)
07S09E: S34	Giant Garter Snake
07S09E: S35	Giant Garter Snake, Longhorn Fairy Shrimp, Vernal Pool Tadpole Shrimp
07S09E: S36	Longhorn Fairy Shrimp, San Joaquin Kit Fox, Vernal Pool Tadpole Shrimp
07S10E: S1	Chinook Salmon (SRWR-ESU)
07S10E: S2-6	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
07S10E: S26	Chinook Salmon (SRWR-ESU), Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
07S10E: S27	Chinook Salmon (SRWR-ESU), Conservancy Fairy Shrimp, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
07S10E: S28	Chinook Salmon (SRWR-ESU), Longhorn Fairy Shrimp, Vernal Pool Tadpole Shrimp
07S10E: S29-31	Chinook Salmon (SRWR-ESU), Longhorn Fairy Shrimp, San Joaquin Kit Fox, Vernal Pool Tadpole Shrimp
07S10E: S32	Chinook Salmon (SRWR-ESU), Conservancy Fairy Shrimp, Longhorn Fairy Shrimp, San Joaquin Kit Fox, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
07S10E: S33	Chinook Salmon (SRWR-ESU), Conservancy Fairy Shrimp, Longhorn Fairy Shrimp, San Joaquin Kit Fox, Vernal Pool Tadpole Shrimp
07S10E: S34	Chinook Salmon (SRWR-ESU), Conservancy Fairy Shrimp, San Joaquin Kit Fox, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
07S10E: S35	Chinook Salmon (SRWR-ESU), San Joaquin Kit Fox, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
07S10E: S36	Chinook Salmon (SRWR-ESU), Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
07S10E: S7-12,15-21	Chinook Salmon (SRWR-ESU)
07S11E: S29	Vernal Pool Tadpole Shrimp
07S11E: S31	Conservancy Fairy Shrimp, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
07S11E: S32-33	Vernal Pool Tadpole Shrimp
07S11E: S35	Conservancy Fairy Shrimp, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp

Section List - Merced County

Sections	Species
07S11E: S36	Colusa Grass, Conservancy Fairy Shrimp, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
07S11E: S4-6	Chinook Salmon (SRWR-ESU)
07S12E: S31	Colusa Grass
07S13E: S13,24-25	Giant Garter Snake
07S13E: S4	Vernal Pool Fairy Shrimp
07S14E: S17-20,29-30	Giant Garter Snake
07S14E: S3-5,8-10	Colusa Grass
07S15E: S10	Colusa Grass
07S15E: S2	Vernal Pool Fairy Shrimp
07S15E: S3,6	Colusa Grass
07S15E: S8	San Joaquin Valley Orcutt Grass
08S07E: S36	San Joaquin Kit Fox
08S08E: S9-10,15-17,19-22,27-35	San Joaquin Kit Fox
08S09E: S1	Longhorn Fairy Shrimp, San Joaquin Kit Fox, Vernal Pool Tadpole Shrimp
08S09E: S11	Giant Garter Snake
08S09E: S12	Giant Garter Snake, San Joaquin Kit Fox
08S09E: S13-14,21-25,27-28,36	Giant Garter Snake
08S09E: S2	Longhorn Fairy Shrimp, Vernal Pool Tadpole Shrimp
08S10E: S1	Chinook Salmon (SRWR-ESU), Conservancy Fairy Shrimp, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
08S10E: S10	Conservancy Fairy Shrimp, Longhorn Fairy Shrimp, San Joaquin Kit Fox, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
08S10E: S11	Chinook Salmon (SRWR-ESU), Longhorn Fairy Shrimp, San Joaquin Kit Fox, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
08S10E: S12-13	Chinook Salmon (SRWR-ESU), Conservancy Fairy Shrimp, San Joaquin Kit Fox, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
08S10E: S14	Chinook Salmon (SRWR-ESU), Longhorn Fairy Shrimp, San Joaquin Kit Fox, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
08S10E: S15	Longhorn Fairy Shrimp, San Joaquin Kit Fox, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
08S10E: S16-17	Longhorn Fairy Shrimp, San Joaquin Kit Fox, Vernal Pool Tadpole Shrimp
08S10E: S18-20	San Joaquin Kit Fox
08S10E: S2	Chinook Salmon (SRWR-ESU), San Joaquin Kit Fox, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
08S10E: S21-22	Longhorn Fairy Shrimp, San Joaquin Kit Fox, Vernal Pool Tadpole Shrimp
08S10E: S23	Longhorn Fairy Shrimp, San Joaquin Kit Fox, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
08S10E: S24	Chinook Salmon (SRWR-ESU), Longhorn Fairy Shrimp, San Joaquin Kit Fox, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp

Section List - Merced County

Sections	Species
08S10E: S25	Chinook Salmon (SRWR-ESU), San Joaquin Kit Fox, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
08S10E: S26	Longhorn Fairy Shrimp, San Joaquin Kit Fox, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
08S10E: S27-28	Longhorn Fairy Shrimp, San Joaquin Kit Fox, Vernal Pool Tadpole Shrimp
08S10E: S29-30	Giant Garter Snake, San Joaquin Kit Fox
08S10E: S3-4	Chinook Salmon (SRWR-ESU), Conservancy Fairy Shrimp, Longhorn Fairy Shrimp, San Joaquin Kit Fox, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
08S10E: S31	Giant Garter Snake
08S10E: S32	Giant Garter Snake, San Joaquin Kit Fox
08S10E: S33-34	San Joaquin Kit Fox
08S10E: S35	Longhorn Fairy Shrimp, San Joaquin Kit Fox, Vernal Pool Tadpole Shrimp
08S10E: S36	San Joaquin Kit Fox, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
08S10E: S5-6	Conservancy Fairy Shrimp, Longhorn Fairy Shrimp, San Joaquin Kit Fox, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
08S10E: S7	Longhorn Fairy Shrimp, San Joaquin Kit Fox, Vernal Pool Tadpole Shrimp
08S10E: S8	Conservancy Fairy Shrimp, Longhorn Fairy Shrimp, San Joaquin Kit Fox, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
08S10E: S9	Longhorn Fairy Shrimp, San Joaquin Kit Fox, Vernal Pool Tadpole Shrimp
08S11E: S1	Colusa Grass, Conservancy Fairy Shrimp, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
08S11E: S17	Chinook Salmon (SRWR-ESU), Conservancy Fairy Shrimp, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
08S11E: S18-20	Chinook Salmon (SRWR-ESU), Conservancy Fairy Shrimp, San Joaquin Kit Fox, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
08S11E: S2,5	Conservancy Fairy Shrimp, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
08S11E: S21	Chinook Salmon (SRWR-ESU), Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
08S11E: S27	Chinook Salmon (SRWR-ESU)
08S11E: S28	Chinook Salmon (SRWR-ESU), San Joaquin Kit Fox, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
08S11E: S29	Chinook Salmon (SRWR-ESU), Conservancy Fairy Shrimp, Giant Garter Snake, San Joaquin Kit Fox, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
08S11E: S30-33	Chinook Salmon (SRWR-ESU), Giant Garter Snake, San Joaquin Kit Fox, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
08S11E: S34	Chinook Salmon (SRWR-ESU), San Joaquin Kit Fox, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp

Section List - Merced County

Sections	Species
08S11E: S35	Chinook Salmon (SRWR-ESU), San Joaquin Kit Fox
08S11E: S36	San Joaquin Kit Fox
08S11E: S6-8	Chinook Salmon (SRWR-ESU), Conservancy Fairy Shrimp, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
08S11E: S9-10,12-13	Conservancy Fairy Shrimp, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
08S12E: S11-12,16-17	Colusa Grass
08S12E: S18	Conservancy Fairy Shrimp, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
08S12E: S22-28,31-36	San Joaquin Kit Fox
08S12E: S6-7	Conservancy Fairy Shrimp, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
08S13E: S24	Colusa Grass
08S13E: S30-31	San Joaquin Kit Fox
08S16E: S16-18,20	Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
08S16E: S8	Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
08S16E: S9	San Joaquin Valley Orcutt Grass
09S07E: S1-2,11-13	San Joaquin Kit Fox
09S07E: S20	Steelhead Trout (CCV-ESU)
09S07E: S24	San Joaquin Kit Fox
09S07E: S32	Steelhead Trout (CCV-ESU)
09S08E: S2-36	San Joaquin Kit Fox
09S09E: S1	Giant Garter Snake
09S09E: S19-20,28-33	San Joaquin Kit Fox
09S10E: S1	Giant Garter Snake, San Joaquin Kit Fox, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
09S10E: S11-14	Giant Garter Snake, San Joaquin Kit Fox
09S10E: S16,21	Giant Garter Snake
09S10E: S2	Giant Garter Snake, San Joaquin Kit Fox
09S10E: S24	San Joaquin Kit Fox
09S10E: S25-27,34-36	Giant Garter Snake
09S10E: S3-4	San Joaquin Kit Fox
09S10E: S5	Giant Garter Snake, San Joaquin Kit Fox
09S10E: S6	Giant Garter Snake
09S10E: S9-10	San Joaquin Kit Fox
09S11E: S1-2	Chinook Salmon (SRWR-ESU), San Joaquin Kit Fox
09S11E: S17	San Joaquin Kit Fox
09S11E: S18-20	Giant Garter Snake, San Joaquin Kit Fox
09S11E: S21	San Joaquin Kit Fox

Section List - Merced County

Sections	Species
09S11E: S22-24	Chinook Salmon (SRWR-ESU)
09S11E: S29-33	Giant Garter Snake
09S11E: S3	Chinook Salmon (SRWR-ESU), San Joaquin Kit Fox, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
09S11E: S4-5	Chinook Salmon (SRWR-ESU), Giant Garter Snake, San Joaquin Kit Fox, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
09S11E: S6	Giant Garter Snake, San Joaquin Kit Fox, Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
09S11E: S7	Giant Garter Snake, San Joaquin Kit Fox
09S11E: S8	San Joaquin Kit Fox
09S11E: S9-16	Chinook Salmon (SRWR-ESU), San Joaquin Kit Fox
09S12E: S1	San Joaquin Kit Fox, Vernal Pool Fairy Shrimp
09S12E: S10	San Joaquin Kit Fox
09S12E: S11-13	San Joaquin Kit Fox, Vernal Pool Fairy Shrimp
09S12E: S14-18	Chinook Salmon (SRWR-ESU), San Joaquin Kit Fox
09S12E: S19-21	Chinook Salmon (SRWR-ESU)
09S12E: S2-5	San Joaquin Kit Fox
09S12E: S22-26	Chinook Salmon (SRWR-ESU), San Joaquin Kit Fox
09S12E: S27-30,33-36	Chinook Salmon (SRWR-ESU)
09S12E: S6-9	Chinook Salmon (SRWR-ESU), San Joaquin Kit Fox
09S13E: S15-16	Blunt-nosed Leopard Lizard
09S13E: S18-19	San Joaquin Kit Fox
09S13E: S20-22,27-29	Blunt-nosed Leopard Lizard
09S13E: S30-32	Chinook Salmon (SRWR-ESU)
09S13E: S6	San Joaquin Kit Fox
09S13E: S7	San Joaquin Kit Fox, Vernal Pool Fairy Shrimp
09S14E: S6	Vernal Pool Tadpole Shrimp
09S16E: S1-3,11	Vernal Pool Tadpole Shrimp
10S07E: S16	San Joaquin Kit Fox, Steelhead Trout (CCV-ESU)
10S07E: S20	San Joaquin Kit Fox
10S07E: S21,29	San Joaquin Kit Fox, Steelhead Trout (CCV-ESU)
10S07E: S30-32	San Joaquin Kit Fox
10S07E: S5	Steelhead Trout (CCV-ESU)
10S07E: S8-9	San Joaquin Kit Fox
10S08E: S1-5,8-12	San Joaquin Kit Fox
10S08E: S13	Blunt-nosed Leopard Lizard, San Joaquin Kit Fox
10S08E: S14-15,22-23	San Joaquin Kit Fox
10S08E: S24-25	Blunt-nosed Leopard Lizard, San Joaquin Kit Fox
10S08E: S26-27,34-36	San Joaquin Kit Fox

Section List - Merced County

Sections	Species
10S09E: S17-20	Blunt-nosed Leopard Lizard, San Joaquin Kit Fox
10S09E: S21-29	San Joaquin Kit Fox
10S09E: S30	Blunt-nosed Leopard Lizard, San Joaquin Kit Fox
10S09E: S31-36	San Joaquin Kit Fox
10S09E: S4-11,13-16	San Joaquin Kit Fox
10S10E: S1-3,10-11,14-16,21-23	Giant Garter Snake
10S10E: S30-32	San Joaquin Kit Fox
10S11E: S4-8,16-22,26-29,33-35	Giant Garter Snake
10S12E: S1-2,12	Chinook Salmon (SRWR-ESU)
10S12E: S22-23,26-27,34-35	Giant Garter Snake
10S13E: S4-10,14-22,28-29	Chinook Salmon (SRWR-ESU)
11S07E: S17,21	Steelhead Trout (CCV-ESU)
11S07E: S28	San Joaquin Kit Fox, Steelhead Trout (CCV-ESU)
11S07E: S29	San Joaquin Kit Fox
11S07E: S32	San Joaquin Kit Fox, Steelhead Trout (CCV-ESU)
11S07E: S33	San Joaquin Kit Fox
11S07E: S5	San Joaquin Kit Fox, Steelhead Trout (CCV-ESU)
11S07E: S6	San Joaquin Kit Fox
11S08E: S1-4,9-16,20-29	San Joaquin Kit Fox
11S08E: S32-33	California Red-legged Frog
11S08E: S35	San Joaquin Kit Fox
11S08E: S36	California Red-legged Frog, San Joaquin Kit Fox
11S09E: S1-19	San Joaquin Kit Fox
11S09E: S20	San Joaquin Kit Fox, Valley Elderberry Longhorn Beetle
11S09E: S21-24	San Joaquin Kit Fox
11S09E: S25-26	Blunt-nosed Leopard Lizard, San Joaquin Kit Fox
11S09E: S27-34	San Joaquin Kit Fox
11S09E: S35-36	Blunt-nosed Leopard Lizard, San Joaquin Kit Fox
11S10E: S30-31	Blunt-nosed Leopard Lizard, San Joaquin Kit Fox
11S10E: S32-34	San Joaquin Kit Fox
11S10E: S35-36	Blunt-nosed Leopard Lizard, San Joaquin Kit Fox
11S10E: S4-9,14-23,25-29	San Joaquin Kit Fox
11S11E: S1	Giant Garter Snake
11S11E: S10-11	Aleutian Canada Goose
11S11E: S12-13	Giant Garter Snake
11S11E: S15	Aleutian Canada Goose
11S11E: S16	Aleutian Canada Goose, Giant Garter Snake
11S11E: S17	Giant Garter Snake

Section List - Merced County

Sections	Species
11S11E: S2-4	Aleutian Canada Goose, Giant Garter Snake
11S11E: S5,7-8	Giant Garter Snake
11S11E: S9	Aleutian Canada Goose, Giant Garter Snake
11S12E: S3-10,15-18,21-22,28	Giant Garter Snake
12S07E: S3-4,24-25	Steelhead Trout (CCV-ESU)
12S08E: S31	Steelhead Trout (CCV-ESU)
12S09E: S1-2	Blunt-nosed Leopard Lizard, San Joaquin Kit Fox
12S09E: S27	California Red-legged Frog, San Joaquin Kit Fox
12S09E: S28,34-36	San Joaquin Kit Fox
12S09E: S3-6,8-17,20-26	San Joaquin Kit Fox
12S10E: S1-5	San Joaquin Kit Fox
12S10E: S12-13	Giant Kangaroo Rat, San Joaquin Kit Fox
12S10E: S14-36	San Joaquin Kit Fox
12S10E: S6	Blunt-nosed Leopard Lizard, San Joaquin Kit Fox
12S10E: S7-11	San Joaquin Kit Fox
12S11E: S17-20	Giant Kangaroo Rat, San Joaquin Kit Fox
12S11E: S28-32	San Joaquin Kit Fox
12S11E: S7	Giant Kangaroo Rat, San Joaquin Kit Fox
12S11E: S8	Giant Kangaroo Rat
13S08E: S6	Steelhead Trout (CCV-ESU)
13S09E: S1-2	San Joaquin Kit Fox
13S09E: S12	San Joaquin Kit Fox
13S09E: S4	California Red-legged Frog
13S10E: S1-17,20-23,27-29	San Joaquin Kit Fox
13S10E: S31	California Red-legged Frog
13S10E: S32	California Red-legged Frog, San Joaquin Kit Fox
13S10E: S33	San Joaquin Kit Fox
13S11E: S6-7	San Joaquin Kit Fox